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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,455	07/23/2003	Hang Li	M61.12-0511	2549

27366 7590 07/17/2007  
WESTMAN CHAMPLIN (MICROSOFT CORPORATION)  
SUITE 1400  
900 SECOND AVENUE SOUTH  
MINNEAPOLIS, MN 55402-3319

EXAMINER
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ALBERTALLI, BRIAN LOUIS

ART UNIT	PAPER NUMBER
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2626

MAIL DATE	DELIVERY MODE
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07/17/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/626,455

Applicant(s)

LI, HANG

Examiner

Brian L. Albertalli

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 and 35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12, 24-29 is/are allowed.
- 6) ☒ Claim(s) 13-23, 30-33 and 35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. The declaration under 37 CFR 1.132 filed 1 May 2007 is sufficient to overcome the rejection of claims 1-23 based upon Cao et al.
2. Applicant's arguments with respect to claims 1-33 and 35 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 101*

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 13-23, 30-33, and 35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 13-23, 30-33, and 35 are directed to "a computer-readable medium". However, the term "computer-readable medium" is defined by the specification as including "communication media", which comprises carrier waves, modulated data signals, wireless media, etc. (see page 7, lines 16-30 of specification). Therefore, the claimed "computer-readable media" encompasses *signals encoded with functional descriptive material* and is not statutory. That is, a signal encoded with functional descriptive material is not a process, machine, composition of matter, or manufacture.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 13-15 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Kohen et al. (*Estimating Word Translation Probabilities from Unrelated Monolingual Corpora Using the EM Algorithm*).

In regard to claim 13, Kohen et al. disclose a computer-readable medium having computer-executable instructions for performing steps comprising:

receiving a string of words in a source language (candidate noun sequence, page 3, 2<sup>nd</sup> column, Outline section);

transforming the string of words into a transformed representation using an iterative algorithm (translation probabilities for the string of words are generated using the iterative EM algorithm, page 3, 2<sup>nd</sup> column, Estimation of Translation Probabilities section);

using the transformed representation to score strings of words in the target language (the translation probabilities are used to score the translations, page 4, 1<sup>st</sup> column, Application section).

In regard to claim 14, Kohen et al. disclose selecting a string of words in the target language based on the score (the highest scoring translation is selected as the translation of a string of words, page 4, 1<sup>st</sup> column, Application section).

In regard to claim 15, Kohen et al. disclose identifying pages containing the selected string of words in the target language as relevant to the string of words in the source language (a web search is conducted to identify counts of words in the target language, page 2, 2<sup>nd</sup> column, final paragraph to page 3, 1<sup>st</sup> column, 1<sup>st</sup> full paragraph).

In regard to claim 23, Kohen et al. disclose the iterative algorithm is an expectation-maximization algorithm (EM algorithm, page 3, 2<sup>nd</sup> column, Estimation of Translation Probabilities section).

### ***Allowable Subject Matter***

7. Claims 1-12 and 24-29 are allowed.

The following is an examiner's statement of reasons for allowance:

In regard to claims 1-12, since the Chao reference has been overcome by the declaration filed under 35 U.S.C. 1.132, Koehn et al. is now the closest prior art of record. Claim 1 requires "transforming a representation of context words in a source language into a transformed representation of context words in the target language". Koehn et al. do not disclose or suggest "a representation of context words in a source language" which is transformed. Rather, Koehn et al. base their models upon direct

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representations of context words *in the target language* (see page 3, 1<sup>st</sup> column, 3<sup>rd</sup> full paragraph).

Regarding claims 24-29, the combination of Itoh et al. and Chin et al. does not disclose or suggest "providing two possible translations for a word to at least two clients" so that the two clients can, in effect, vote on a correct translation for the word. While Itoh et al. allows a single user to select a correct translation, the translation is stored in a user specific dictionary. Therefore, there is no motivation to allow additional user's to influence a particular user's personal dictionary.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian L. Albertalli whose telephone number is (571) 272-7616. The examiner can normally be reached on Mon - Fri, 8:00 AM - 5:30 PM, every second Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BLA 7/9/07



DAVID HUDSPETH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600